



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

The collaborators will be numerous, embracing such well-known names as Cohn, Eichler, Luerssen, Pfitzer, etc., thus insuring a thoroughly reliable work. It is estimated that the whole work will make some five thousand pages, illustrated with several thousand wood-cuts. It will be published in parts of forty-eight pages each, at a subscription price of a mark and a half each.

—Dr. Brown-Séquard, of Paris, has been elected President of the French Zoological Society, in the place of the late Paul Bert.

PROCEEDINGS OF SCIENTIFIC SOCIETIES.

Boston Society of Natural History.—April 6, 1887.—Dr. Edward G. Gardiner spoke of the development and homologies of hoofs, claws, and nails, discussing his own studies as well as those of Dr. Boas, of Copenhagen. Mr. Samuel H. Scudder read the results of his studies of fossil butterflies. Fossil butterflies, he said, are very rare. About thirty thousand specimens of fossil insects are now in collections, the celebrated beds at Florissant, Colorado, furnishing about half of these. Of this large number only sixteen are butterflies, nine of these being from the European tertiaries and seven from Florissant. These sixteen belonged to three existing families, the American species all being members of the Nymphalidæ, while the European were divided among this family and the Hesperidæ and Papilionidæ. The European species showed many resemblances to the forms found in the East Indies and sub-tropical America to-day, while the American specimens were more American in relationship. One, however (a member of the Libythæinæ), found its nearest living relative on the coast of West Africa. One specimen of these insects was remarkably well preserved. Not only did it show the structure of antennæ, palpi, legs, and wing-nervures, but it was possible to detect the pattern of the color-markings, and even to draw some of the scales on the wings. Suggestions as to the possible food-plants, based on the present habits as well as on contemporaneous flora, were given.

Middlesex [Mass.] Institute.—April 13, 1887.—The paper of the meeting was upon a trip to Alaska by William Chase. It was illustrated by lantern-views, and detailed, among other things, the appearance of the Muir Glacier, of Glacier Bay.

Brooklyn Entomological Society.—March 1, 1887.—Mr. A. C. Weeks described the life-history of the moth *Tarache*

delecta. The striped larva, which somewhat resembles that of *Alypia octomaculata*, feeds upon the leaves of *Hibiscus moscheutos*. Mr. Weeks also spoke of the effect of the weather upon the time of emergence of imagines from the pupal state.

Entomological Society of Washington.—March 3, 1887.—Mr. J. D. Sherman, Jr., gave a record of insects observed in 1886 near Peekskill, N. Y. Mr. J. B. Smith called attention to the fact that the antennæ of *Cressonia juglandis* resembled that of the Saturnians in its double pectinations, and that two species have hitherto been confounded under the name of *Euerythura phasma*. He also said that he regarded most of the so-called varieties of *Callimorpha lecontei* as entitled to specific rank, basing his opinion upon the large series in the museum. Dr. E. A. Schwartz enumerated eighteen species of Scolytidæ occurring on *Pinus inops*, and exhibited and described the galleries made by *Pityophthorus pullus*. The central chamber is rather large and oval, and from it radiate from three to five long and undulating galleries. The larval galleries are greatly curved.

Philadelphia Academy of Natural Sciences.—August 17, 1886.—A letter was read from E. H. Thompson, United States Consul at Merida, Yucatan. The writer stated, with reference to the account of fatality from scorpion-bites in Durango, that in no case does death result from such a cause in Yucatan. Tingling and numbness result, and are relieved by strong ammonia. Miss A. M. Fields, in a letter from Swatow, China, stated that *Bombyx mori* can be readily raised on lettuce, but in that case yields coarser silk. Silk-glands taken from the larvæ of several species of large moths just before entering the pupa stage are used for fishing-lines. Mr. Woolman presented a specimen of erythrite from French Creek, Pa. The mineral is rare in the State.

August 24.—Mr. Meehan read a paper on the agency of insects in plant-fertilization. He held that the dependence of a plant on insect aid is rather an evidence that its race is nearly run. The long, black anthers of *Cassia marilandica* never seem to shed their pollen unless the membrane at the apex is broken by humble-bees, who pierce it to get at the contents. A plant covered with gauze neither shed pollen nor produced seed.

September 14.—Miss H. C. DeS. Abbott read a paper on Saponine, a compound which is always a constructive and formative element of the plant containing it, and one which, by its action on other elements, probably aids in nutrition. It is absent when the floral elements are simple, and increases in quantity as they are of higher grade. Chemical constituents are evolved *pari passu* with the evolution of the plant, and are a fit basis for botanical classification. Miss Abbott also called attention to two new substances obtained by her from a Honduras plant, and to

chichipatin, a new dye. The Rev. Dr. McCook called attention to the longevity of some arthropods. He had kept a tarantula alive since 1882. The queen of Sir J. Lubbock's colony of ants was seven years old in 1882. Dr. Leidy remarked that Muybridge's photographs of lions in motion distinctly showed spots, though none could be detected by the eye.

September 27.—Miss Fielde sent a communication relative to the spiritist practices of Chinese women.

October 5.—Prof. H. C. Lewis read a paper upon the results of his last two years' geological work in Europe. Glacial action was essentially identical on both sides of the Atlantic. The ice-sheet which once covered the greater part of Ireland was composed of confluent glaciers, while distinct local glaciers occurred in non-glaciated areas. There seem to have been five centres of glaciation. No evidence of any great marine submergence was discovered. Ice coming from Scotland across the North Channel seems to have joined the Irish sheet, and a mass of ice filled the Irish Sea, overriding the Isle of Man and Anglesea. Wales had three distinct systems of glaciers. The finest exhibition of a terminal moraine in England is at Ellesmere, Shropshire. Professor Lewis enunciated the principle that whenever marine shells occurred in glacial deposits at high levels it was not owing to submergence of the land, but to the advance of the ice out of the sea on to the land. He also believed that there had been but one advance of the ice. Probably the land had been elevated some five hundred feet, with a fall of temperature of about 10° Fahr. Professor Heilprin exhibited a series of fossil shells of the genus *Fulgur*, showing the derivation of the forms from each other. Miss L. E. Holman told of a new mode of multiplication of *amœbæ*. A smaller one was enveloped by a larger and afterwards released; it then threw out spores.

October 17.—Professor Heilprin called attention to the discovery, in the Miocene beds of Tampa, Fla., of three species of *Partula*, a genus now confined to a small group of Polynesian islands. The probability of a former connection between the Atlantic and Pacific was spoken of. A fossil cowry from Florida was distinguished from all known forms by the presence of a sulcus from the mouth around the apex.

October 24.—Mr. Meehan gave some facts of local plant distribution. In one case, under the shelter of a blackberry-bush in a cleared spot in a wood, twenty-two species not found in other parts of the wood had sprung up. Professor Ryder exhibited a curious fish, related to *Gastrostomus*, dredged by the "Albatross" in fifteen hundred and nine fathoms. Professor Scott presented a paper on *Mesonyx* and *Pachyæna*.

November 2.—Professor Ryder spoke concerning the last experiments in oyster culture carried on by the United States government. Mr. Meehan gave reasons for the belief that cold

alone would not account for the effect produced on plants at the close of the year.

November 9.—Prof. J. A. Ryder called attention to the fact that the oil-drops in the eggs of *Macropus venustus* are one-seventh of the whole mass, and they will float until the oil is separated. The buoyancy of the ova of the cod is not caused by the oil-drops in them. Dr. Koenig described a silicate allied to black garnet, but with eight per cent. of titanite oxide. Dr. Dolley stated that the organ in *Porpita* supposed by Conn and Beyer to be a sense-organ was, in truth, a mucous gland furnishing a plentiful secretion to the tentacles. Mr. Ford exhibited specimens to prove the increase of size of *Arca pexata* as it goes north and east.

November 16.—Professor Heilprin described some miocene shells from Cumberland County, N. J. The specimens established the fact that these New Jersey beds belong to the lowest miocene. The same speaker showed a curious gastropod, which has a two-story shell, a dome being secreted by the mantle above the true spine. Dr. Koenig stated that "schorlemite" was simply a modification of garnet. Professor Ryder described the extrusion of the polar globules from fish-ova. A paper, "On an Undescribed Meteorite from West Tennessee," was presented from Dr. F. A. Genth.

November 23.—Dr. Dolley called attention to the action of fibres of spider-web in starting lateral branches of stalactites. Professor Ryder gave the results of his investigation of the hepatic tubules of *Oniscus*. Professor Koenig placed on record the occurrence of a manganese-zinc serpentine at Franklin, N. J.

November 30.—Miss H. C. DeS. Abbott announced the discovery of Hæmatoxylin, or logwood dye, in *Sarica indica*. In the bark it is more plentiful than in the logwood of commerce. Professor Ryder said he was in possession of facts which proved that pathological changes might be transmitted and become morphological.

December 21.—Professor Heilprin described a new *Aplysia* from the west coast of Florida. The presentation to the Academy of the collection of land-shells made by the late Mr. Brown, of Princeton, was announced.

January 8, 1887.—Professor Ryder described certain funnel-shaped ducts on the catfish, just behind the head. They are urinary in function. A curious core, exactly fitting what seemed a bore-hole, was by Dr. Koenig announced to be a natural product, and to consist of molybdenite. Mr. Meehan exhibited a form of fungus (*Cordiceps taylori*) which is found on the heads of Australian caterpillars. Professor Heilprin described a new *Ictalurus* from Lake Okeechobee, Fla.

January 22.—Dr. Fetterolf presented a slab of Mauch Chunk red shale from the base of the Carboniferous. It had a fine am-

phibian foot-print, stated by Professor Heilprin to be certainly that of an animal generically distinct from that characterized by the late Dr. Lea. Professor Ryder called attention to certain cells immediately surrounding the yolk of fish-ova. These take a deep color on staining, and in fishes of the shark and ray tribes have been seen to be sucked up by the heart of the embryo and thrown into the circulation. Dr. H. H. Rusby gave an account of his exploration of the coca region of Bolivia. His collection included two hundred and fifty to three hundred kinds of unknown drugs. A paper on "New Generic Forms of Cretaceous Mollusca," by Dr. C. A. White, was presented.

January 25, 1887.—Professor Ryder called attention to the existence of pathological growths in the lower animals, and described a lobulated tumor from the heart of an oyster, a mass of organic tissue formed in the fore part of a shad's alimentary canal, and the degeneration of the Wolffian bodies of a goldfish. A letter from Miss A. M. Fielde, describing the geology of Southeastern China, and accompanied by specimens of the rocks, was read. Granite, trap, and unfossiliferous red sandstone were among the rocks. Miss Fielde also announced the collection, around Swatow, of several forms of rhizopods identical with those described by Dr. Leidy from Philadelphia. Dr. McCook stated that *Formica fusca*, the ant enslaved by *F. sanguinea* and *Polyergus lucidus*, builds, when exposed to the attacks of the latter, a formicary, which is quite flat and has all its entrances concealed by grass and chips of bark. When the same species deems itself secure it forms a mound, over which openings are scattered without attempt at concealment.

National Academy of Sciences.—The following papers were read at the meeting commencing April 19, 1887: "On Chemical Integration," by T. Sterry Hunt; "Results of the Investigation of the Charleston Earthquake," by C. E. Dutton and Everett Hayden; "On some Phenomena of Binocular Vision," by Joseph LeConte; "The Vegetation of the Hot Springs of the Yellowstone Park," by W. G. Farlow; "On the Fore Limb and Shoulder-Girdle of Eryops, and on the Vertebrates of the Triassic," by E. D. Cope; "On the Rainless Character of the Sahara," by Elias Loomis; "The Color of the Sun," by S. P. Langley; "A New Map of the Spectrum," by S. P. Langley; "Chemical Constitution and Taste," by Ira Remsen; "On a New Class of Compounds analogous to the Phthaleins," by Ira Remsen; "On the Decomposition of Diazo-compounds by Alcohol," by Ira Remsen; "On the Ancestry of the Deaf," by A. G. Bell; "On the Notation of Kinship," by A. G. Bell; "On the Determination of Orbits of Planets and Comets," by J. W. Gibbs; "On the Serpentine of Syracuse, New York," by G. H. Williams; "On the Barometric Oscillation—Diurnal and Annual," by A. W. Greely;

"On the Floridian Geology," by W. H. Dall; "On the Taconic System of Emmons," by C. D. Walcott; "Is there a Huronian Group?" by R. D. Irving; "On the Brain of *Ceratodus*, with Remarks on the General Morphology of the Vertebrate Brain," by B. G. Wilder; "Outline of the Ichthyological System," by Theodore Gill.

The following new members were elected: Prof. H. P. Bowditch, Boston; Prof. George H. Cook, New Brunswick; Prof. T. C. Mendenhall, Terre Haute.

Dr. A. W. Hoffmann, Berlin, was elected foreign correspondent.